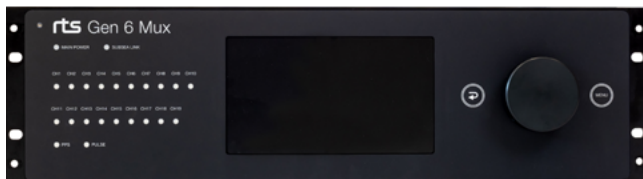


RTS Gen 6 Mux

Standard HD

The new RTS Gen 6 comes with

- 19 channels
- 3 x HD SDI Video as standard
- 9 x Ethernet
- Software resettable fuse on every channel
- 1200 W DC power
- Remote operation from web interface
- 3000 or 4500 meter depth ratings
- Service friendly
- Same compact size as the Gen 5



The next generation survey multiplexer

With 15 years of experience with the Gen 5 Mux, and previous generations of sensor interface products, RTS brings you the next generation survey multiplexer. The Gen 6 is a redesign of the Gen 5, from the ground, to improve reliability, performance, and service friendliness of the unit. The unit is easily operated from the topside frontpanel or remotely via the integrated web interface.

Specifications

Product	RTS Gen 6 MUX Standard HD
Country of origin	Norway
Manufacturer	Rental Technology & Services AS

RTS – Rental Technology & Services

rts.as



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Main features

- 19 channels
- 3 x HD SDI Video as standard
- 9 x Ethernet
- Software resettable fuse on every channel
- 1200 W DC power
- Remote operation from web interface
- 3000 or 4500 meter depth ratingb
- Service friendly
- Same compact size as the Gen 5

Technical specifications

Fiber interface	Optional fiber interface(select one) 1. Mounted fiber assembly. Easy integration With all standard ROVs (3000 m depth rating) 2. Shilling feed trough plugable fiber Interface (4500 m depth rating) 3. Other fiber interfaces can be delivered on request
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Channels

Type	Power output	Connector
3 x HD SDI video with RS232	24 VDC	Saiv 05-04 Coax
6 x Serial RS232 with PPS/PULSE (2 x RS485 software selectable)	24 VDC	Seacon MCBH6F
1 x Serial RS232	100/240 VAC	Seacon MCBH6F Special
4 x 10/100 Mb/s ethernet general purpose	24/48 VDC user selectable	Seacon MCBH8F Special
1 x INS channel with 10/100 Mb/s ethernet, 2 x RS232, PPS/PULSE and PULSE IN	2 x 24 VDC for INS and DVL	SeaKing K19 FCR
2 x 10/100/1000 Mb/s ethernet general purpose	24/48 VDC user selectable	SeaKing K19 FCR
2 x 1000 Mb/s ethernet for multibeam	24/48 VDC user selectable	SeaKing K19 FCR

Power subsea unit

AC Input	90 - 264 VAC 50/60 Hz
24 VDC output	650 W nominal with 800 W peak
48 VDC output	650 W nominal with 800 W peak

Environmental subsea unit

Size	Ø 230 mm x 454 mm
Weight in air	34.2 kg
Depth rating	3000 or 4500 meter depth rating
Housing	Titanium

Topside features

Features	Redesigned frontpanel with larger display Serial channels on RJ45 Remote control via self hosted web interface
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Additional features

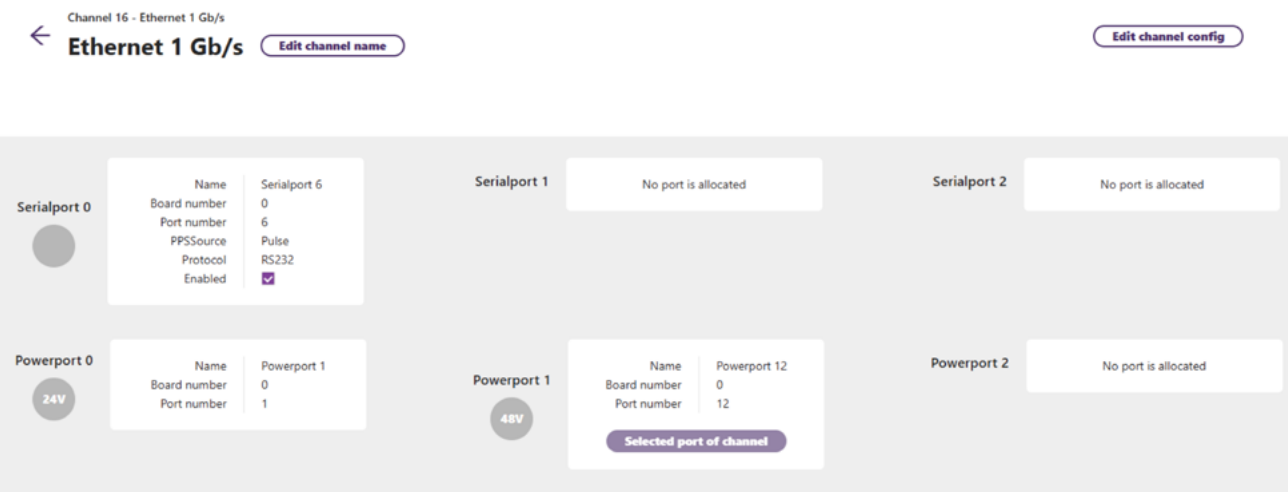
Features	Power monitor and software resettable fuse on every channel Advanced diagnostics system Internal network switch with 8 x 1 Gb/s copper ports, 2 x 1 Gb/s backbone Real-time fiber attenuation monitoring Ethernet channel setup and traffic monitoring Support for Norbit WBMS multibeam sonar Remote support via integrated team viewer Client API for integration with 3rd party software
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Channel Matrix

Channel	Function	Serial interface	Ethernet interface	Additional interface	Power output	Output voltage	Subsea connector
Channel 1	Serial + HDSDI Video	RS232			70 W	24 VDC	SAIV 05-04 Coax
Channel 2	Serial + AC Out	RS232				110/240 VAC	Seacon MCBH-6F Special
Channel 3	Serial	RS232 /RS485		PPS/PULSE	70 W	24 VDC	Seacon MCBH6F
Channel 4	Serial	RS232 /RS485		PPS/PULSE	70 W	24 VDC	Seacon MCBH6F
Channel 5	Serial + HDSDI Video	RS232			70 W	24 VDC	SAIV 05-04 Coax
Channel 6	Serial	RS232		PPS/PULSE	70 W	24 VDC	Seacon MCBH6F
Channel 7	Serial	RS232		PPS/PULSE	70 W	24 VDC	Seacon MCBH6F
Channel 8	Serial	RS232		PPS/PULSE	70 W	24 VDC	Seacon MCBH6F
Channel 9	Serial	RS232		PPS/PULSE	70 W	24 VDC	Seacon MCBH6F
Channel 10	Serial + HDSDI Video	RS232			70 W	24 VDC	SAIV 05-04 Coax
Channel 11	Ethernet		10/100 Mb/s		70/100 W	24/48 VDC	Seacon MCBH8F Special
Channel 12	Ethernet		10/100 Mb/s		70/100 W	24/48 VDC	Seacon MCBH8F Special
Channel 13	Ethernet		10/100 Mb/s		70/100 W	24/48 VDC	Seacon MCBH8F Special
Channel 14	Ethernet		10/100 Mb/s		70/100 W	24/48 VDC	Seacon MCBH8F Special
Channel 15	INS + EXT	2 x RS232	10/100 Mb/s	PPS/PULSE + PULSE IN	70/70 W	2 x 24 VDC	SeaKing K19FCR
Channel 16	Ethernet	RS232	10/100/1000 Mb/s	PPS/PULSE	140/290 W	24/48 VDC	SeaKing K19FCRK19FCR
Channel 17	Ethernet	RS232	10/100/1000 Mb/s	PPS/PULSE	140/290 W	24/48 VDC	SeaKing K19FCR
Channel 18	MBE		1000 Mb/s	PPS/PULSE	70/290 W	24/48 VDC	SeaKing KX11FCR
Channel 19	MBE		1000 Mb/s	PPS/PULSE	70/290 W	24/48 VDC	SeaKing KX11FCR
Power In							G5506-2003
Optical							Mounted fiber assembly

User friendly channel setup

- Change channel name. The channel name will be updated in the front panel display
- Select source for PPS or PULSE subsea output
- Change between RS232 and RS485 (Ch 3 and Ch4)
- Set voltage output to 24 VDC or 48 VDC (Ch 11, 12, 13, 14, 16, 17, 18 and 19)



Ethernet Channel Setup and Traffic Monitoring

- Integrated Ethernet packet counter for real-time monitoring of channel traffic and packet activity
- Configurable Ethernet speed setting with lock function to enforce a fixed link speed when required
- Real-time Ethernet link status indication for identifying if faults are due to the subsea cable, topside cable, and fiber communication path

Gen6 Studio

Subsea link
All good: 11:31:59

System ok

Config files status
Synchronized

Power output
24VDC 0 W/650W
48VDC 0 W/650W

Channel	Name	Subsea Configuration		Subsea packet count			Port Status	
				Rx	Tx	Subsea	Topside	
11	Ethernet 10/100 Mb/s	100 Mb/s Full Duplex	Advertise	0	0	No link	No link	
12	Ethernet 10/100 Mb/s	100 Mb/s Full Duplex	Advertise	0	0	No link	No link	
13	Ethernet 10/100 Mb/s	100 Mb/s Full Duplex	Advertise	0	0	No link	No link	
14	Ethernet 10/100 Mb/s	100 Mb/s Full Duplex	Advertise	0	0	No link	No link	
15	INS+DVL	100 Mb/s Full Duplex	Advertise	0	0	No link	No link	
16	Ethernet 1 Gb/s	1 Gb/s	Advertise	0	0	No link	No link	
17	Ethernet 1 Gb/s	1 Gb/s	Advertise	0	0	No link	No link	
18	MBE	1 Gb/s		-	-	-	No link	
19	MBE	1 Gb/s		-	-	-	No link	

Real-time fiber link monitoring

- Individual real-time monitoring of fiber link wavelengths for continuous optical channel status verification
- Real-time optical loss indication to support rapid identification of attenuation, degradation, or fiber path issues

Fiber Link									
Location	Name	#	Wavelength [nm]	Temp. [°C]	Volt. [V]	Tx bias [μA]	Tx power [dBm]	Rx power [dBm]	Loss [dBm]
Topside	Gateway	0	1530	48.49	3.36	5.25	1.67	-1.43	3.69
Topside	Switch	1	1330	41.52	3.34	19.38	2.60	-1.16	3.41
Topside	Switch	2	1490	43.84	3.35	25.50	2.94	-1.77	4.36
Topside	Mc1	3	1410	-	-	-	-	-	-
Topside	Mc2	4	1450	-	-	-	-	-	-
Topside	Video 1	5	1550	60.50	3.12	-	-	1.67	0.41
Topside	Video 2	6	1550	58.00	3.13	-	-	-1.31	3.10
Topside	Video 3	7	1550	56.00	3.11	-	-	-1.19	3.40
Subsea	Controller	16	1510	52.00	3.37	6.83	2.26	0.32	1.35
Subsea	Switch	17	1310	48.02	3.30	24.68	2.25	-0.57	3.17
Subsea	Switch	18	1470	49.88	3.34	22.85	2.59	-1.37	4.31
Subsea	Mc1	19	1350	-	-	-	-	-	-
Subsea	Mc2	20	1430	-	-	-	-	-	-
Subsea	Video 1	21	1550	60.00	3.34	5.85	2.08	-	-
Subsea	Video 2	22	1570	59.00	3.35	5.59	1.79	-	-
Subsea	Video 3	23	1590	62.00	3.34	5.28	2.21	-	-